



Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1: Canceled.

Claim 2 (Currently Amended): A method as defined in claim 1 wherein of forming a portion of an integrated circuit comprising:

providing a silicon carbide base;

the step of epitaxially growing the a dielectric film on the silicon carbide base further comprises by forming a crystalline carbon-containing film on the silicon carbide base; and

forming a CMOS device on the silicon carbide base and epitaxially grown dielectric film, wherein the CMOS device includes a channel region and a gate dielectric, the channel region is formed in the silicon carbide base and the gate dielectric is formed by the epitaxially grown dielectric film.

Claim 3 (Currently Amended): A method as defined in claim 1 wherein of forming a portion of an integrated circuit comprising:

providing a silicon carbide base;

the step of epitaxially growing the a dielectric film on the silicon carbide base by further comprises forming a crystalline carbon film on the silicon carbide base; and

forming a CMOS device on the silicon carbide base and epitaxially grown dielectric film, wherein the CMOS device includes a channel region and a gate dielectric, the channel region is formed in the silicon carbide base and the gate dielectric is formed by the epitaxially grown dielectric film.

Claim 4 (Currently Amended): A method of forming a portion of an integrated circuit as defined in claim 1 further comprising:

providing a silicon substrate; and

~~the step of providing the silicon carbide base further comprises epitaxially growing the a silicon carbide base on the silicon substrate; epitaxially growing a dielectric film on the silicon carbide base; and forming a CMOS device on the silicon carbide base and epitaxially grown dielectric film, wherein the CMOS device includes a channel region and a gate dielectric, the channel region is formed in the silicon carbide base and the gate dielectric is formed by the epitaxially grown dielectric film.~~

Claim 5 (Currently Amended): A method of forming a portion of an integrated circuit comprising as defined in claim 1 wherein:

providing a silicon carbide base;

epitaxially growing a dielectric film on the silicon carbide base; and
~~the step of forming the a CMOS device further comprises on the silicon carbide base and epitaxially grown dielectric film including forming a silicon carbide region on the epitaxially grown dielectric film, wherein the CMOS device further includes a channel region, a gate dielectric and a gate electrode, the channel region is formed in the silicon carbide base, the gate dielectric is formed by the epitaxially grown dielectric film and the a-gate electrode is formed by the silicon carbide region.~~

Claim 6 (Original): A method as defined in claim 5 wherein:

~~the step of forming the silicon carbide region on the epitaxially grown dielectric film further comprises epitaxially growing a silicon carbide layer on the epitaxially grown dielectric film.~~

Claim 7 (Original): A method as defined in claim 5 wherein:

~~the step of forming the silicon carbide region on the epitaxially grown dielectric film further comprises depositing a silicon carbide layer on the epitaxially grown dielectric film.~~

Claim 8 (Original): A method of forming a CMOS device having a channel region and a gate dielectric region in an integrated circuit comprising:

- providing a semiconductor substrate;
- epitaxially growing a strained silicon carbide film on the semiconductor substrate;
- epitaxially growing a crystalline carbon-containing film on the silicon carbide film;
- forming the gate dielectric region of the CMOS device in the epitaxially grown crystalline carbon-containing film; and
- forming the channel region of the CMOS device in the epitaxially grown strained silicon carbide film.

Claim 9 (Original): A method as defined in claim 8 wherein the CMOS device further has a gate electrode region, further comprising:

- epitaxially growing a silicon carbide film on the crystalline carbon-containing film of the gate dielectric region; and
- forming the gate electrode region of the CMOS device in the silicon carbide film epitaxially grown on the crystalline carbon-containing film of the gate dielectric region.

Claim 10 (Withdrawn): An integrated circuit comprising:

- a silicon carbide base;
- a dielectric film epitaxially grown on the silicon carbide base; and
- a CMOS device including a channel region formed in the silicon carbide base and a gate dielectric formed by the epitaxially grown dielectric film.

Claim 11 (Withdrawn): An integrated circuit as defined in claim 10 wherein:

- the epitaxially grown dielectric film includes crystalline carbon.

Claim 12 (Withdrawn): An integrated circuit as defined in claim 10 wherein:

- the epitaxially grown dielectric film has a dielectric constant larger than 4.5.

Claim 13 (Withdrawn): An integrated circuit as defined in claim 10 further comprising:

a silicon substrate;

wherein the silicon carbide base is formed on the silicon substrate.

Claim 14 (Withdrawn): An integrated circuit as defined in claim 13 wherein:
the silicon carbide base is epitaxially grown on the silicon substrate.

Claim 15 (Withdrawn): An integrated circuit as defined in claim 14 wherein:
the epitaxially grown silicon carbide base is a strained silicon carbide film.

Claim 16 (Withdrawn): An integrated circuit as defined in claim 10 wherein:
the silicon carbide base comprises a silicon carbide substrate.

Claim 17 (Withdrawn): An integrated circuit as defined in claim 10 further comprising:

a silicon carbide region formed on the epitaxially grown dielectric film;
wherein the CMOS device further includes a gate electrode formed by the silicon carbide region.

Claim 18 (Withdrawn): An integrated circuit as defined in claim 17 wherein:
the silicon carbide region is epitaxially grown on the epitaxially grown dielectric film.

Claim 19 (Withdrawn): An integrated circuit as defined in claim 17 wherein:
the silicon carbide region is deposited on the epitaxially grown dielectric film.